

Attorney Docket No.: VN734RI *26.02*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Reissue Application of: Worsley, et al.)

Application No.: 09/231,855)

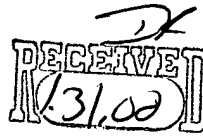
Filed: January 14, 1999)

For: ASYNCHRONOUS PROCESSOR)
ACCESS TO A SWITCH TABLE IN A)
NETWORK WITH ISOCHRONOUS)
CAPABILITY)

Examiner: Ton, D.

Group Art Unit: 2661

Assistant Commissioner for Patents
Washington, D.C. 20231



Official

TRANSMITTAL LETTER - SURRENDER OF PATENT

In response to an office action mailed April 23, 2001, transmitted herewith is the following:

1. U.S. Patent No. 5,594,734 Issued January 14, 1997 (Ribbon).

Applicant is the owner by assignment of the entire interest in said original patent and hereby surrenders said letters patent.

Respectfully submitted,

Alan R. Loudermilk

Alan R. Loudermilk
Registration No. 32,788
Attorney for Applicant(s)

Date: April 26, 2001
10950 North Blaney Ave., Suite B
Cupertino, CA 95014
408-342-1866

CERTIFICATION UNDER 37 C.F.R. 1.10

I hereby certify that this Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date April 26, 2001, Express Mail Label No.: ET 232948508 US, addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Karen A. Rogers
Karen A. Rogers



US605594734A

United States Patent [19]

Worsley et al.

[11] **Patent Number:** **5,594,734**[45] **Date of Patent:** **Jan. 14, 1997**

[54] **ASYNCHRONOUS PROCESSOR ACCESS TO A SWITCH TABLE IN A NETWORK WITH ISOCRONOUS CAPABILITY**

[75] **Inventors:** Debra J. Worsley, Vista; Michael T. Werstlein, Sunnyvale; Richard W. Thalk, San Jose, all of Calif.

[73] **Assignee:** National Semiconductor Corporation, Santa Clara, Calif.

[21] **Appl. No.:** 146,336

[22] **Filed:** Nov. 1, 1993

Related U.S. Application Data

[63] **Continuation-in-part of Ser. No. 969,916, Nov. 2, 1992, abandoned.**

[51] **Int. Cl.⁶** H04L 12/43

[52] **U.S. Cl.** 370/395; 370/513; 395/250

[58] **Field of Search** 370/66-68, 85.1, 370/85.13, 85.14, 85.15, 110.1, 112, 94.3, 55, 58.1, 60, 94.2, 119; 340/825.52, 58.1; 395/250, 830, 823, 880, 550

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(List continued on next page.)

Primary Examiner—Benedict V. Safourek

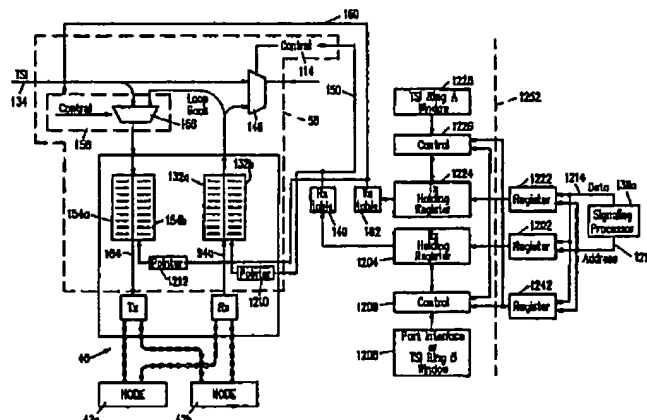
Assistant Examiner—Chau T. Nguyen

Attorney, Agent, or Firm—Limbach & Limbach LLP

[57]

ABSTRACT

A data communication system, such as a local area network, is provided with a capability of transmitting isochronous data. Preferably the system conveys both isochronous data and non-isochronous data by time-multiplexing the data into a recurring frame structure on a four-bit nibble basis. Switching of data is handled using switching tables. The tables can be updated by a processor. Updates can be performed asynchronously so that the processor does not have to wait until the switch tables are in an unused updatable state before outputting the update information. An efficient encoding scheme permits transmission of both isochronous and non-isochronous data over existing media, such as twisted pair, without degrading bandwidth previously achieved for non-isochronous data over the same media, such as using an Ethernet system. The arriving data is de-multiplexed at the hub into separate channels for handling the separate streams by appropriate hardware.

18 Claims, 19 Drawing Sheets



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Patent Office Acknowledgement

S/N: 09/231,855 File No.: VN734RT Mailed by: KR Date Mailed: 4/26/01
Title: Asynchronous Processor Access to a Switch Table in a Network
Client Name: Verical Networks, Inc. with Isachronous Capability

The Following due 6/23/01 in the U.S. Patent & Trademark Office was received in the
Patent & Trademark Office on the date stamped hereon:

☐ Patent Application
☐ Amendment

☐ Decl., Affidavit or Oath
☐ Assign; Dep. Account 50-0251

☒ Other: Transmittal Letter, Surrender of Patent
Ribbon Patent 5,594,734

☐ Drawings, # of Sheets
☐ Formal ☐ Informal
☐ Issue Fee Payment Transmittal
☐ Advance Soft Copy Order
☐ Form 1083 Transmittal Letter



LOUDERMILK & ASSOCIATES

INTELLECTUAL PROPERTY COUNSELORS

ALAN R. LOUDERMILK†

J. NICHOLAS GROSS‡

FACSIMILE TRANSMITTAL SHEET

DELIVER TO: Exam. Dang Ton	FROM: Karen A. Rogers <i>Karen Rogers</i>
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OR FAX US AT 408-342-1868. THANK YOU.

☒ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

In response to my status telephone call of 1/29/02, you left me a message yesterday regarding 09/231,855 that the surrender of patent No. 5,594,734 was not in the case file. Further to my follow-up voice mail message this morning, attached is a copy of the documents we submitted to the Patent Office by Express Mail on April 26, 2001, including the Express Mail Receipt, the returned postcard with a PTO date stamp of 4/26/01, and a copy of the cover sheet of Ribbon Patent No. 5,594,734, which we submitted therewith. According to your records these documents were not received at the PTO.

I look forward to your response. Please contact me immediately should you have any questions. Thank you very much for your attention to this matter. Best regards.

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10950 N. Blaney Avenue, Suite B, Cupertino, California 95014
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